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12/04/01  
jc698 U.S. PTO

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. 03248.00038

First Inventor Anthony C. Mulligan, et al.

Title Aligned Composite Structures For Mitigation Of Impact Damage And Resistance To Wear In Dynamic Environments

Express Mail Label No. EL 820756232 US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
*(Submit an original and a duplicate for fee processing)*
2.  Applicant claims small entity status.  
See 37 CFR 1.27.
3.  Specification [Total Pages 33]  
*(preferred arrangement set forth below)*  
- Descriptive title of the Invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table,  
or a computer program listing appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (*if filed*)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
4.  Drawing(s) (35 U.S.C.113) [Total Sheets 4 ]
5. Oath or Declaration [Total Pages 3 ]  
a.  Newly executed (original or copy)  
b.  Copy from a prior application (37 CFR 1.63 (d))  
*(for a continuation/divisional with Box 18 completed)*  
i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6.  Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO:** Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7.  CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
*(if applicable, all necessary)*
- a.  Computer Readable Form (CRF)
- b. Specification Sequence Listing on:  
i.  CD-ROM or CD-R (2 copies); or  
ii.  paper
- c.  Statements verifying identity of above copies

**ACCOMPANYING APPLICATIONS PARTS**

9.  Assignment Papers (cover sheet & document(s))
10.  37 C.F.R. §3.73(b) Statement  Power of  
*(when there is an assignee)* Attorney
11.  English Translation Document (*if applicable*)
12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS  
Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503)  
*(Should be specifically itemized)*
15.  Certified Copy of Priority Document(s)  
*(if foreign priority is claimed)*
16.  Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17.  Other: Certificate of Mailing Via U.S. Express Mail

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,  
or in an Application Data Sheet under 37 CFR 1.76: Continuation     Divisional     Continuation-in-part (CIP)

of prior application No. \_\_\_\_\_ / \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_

Group / Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied  
under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference.  
The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.**17. CORRESPONDENCE ADDRESS**

<input type="checkbox"/> Customer Number or Bar Code Label	(Insert Customer No. or Attach bar code label here)			<input type="checkbox"/> Correspondence address below
--	---	--	--	---

Name					
	Banner & Witcoff, Ltd.				
Address	10 South Wacker Drive				
	Suite 3000				
City	Chicago	State	Illinois	Zip Code	60606
Country	United States of America	Telephone	312-715-1000	Fax	312-715-1234

Name (Print/Type)	Rebecca P. Rokos	Registration No. (Attorney/Agent)	42,109	
Signature			Date	December 4, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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12/04/01

# FEE TRANSMITTAL for FY 2002

*Patent fees are subject to annual revision.*

**TOTAL AMOUNT OF PAYMENT** (\$ 496)

Complete if Known	
Application Number	Not Yet Assigned
Filing Date	Concurrently Herewith
First Named Inventor	Anthony C. Mulligan
Examiner Name	Not Yet Assigned
Group / Art Unit	Not Yet Assigned
Attorney Docket No.	03248.00038

METHOD OF PAYMENT (check one)				FEE CALCULATION (continued)																																																																																																																																																																																																	
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:  Deposit Account Number 01-0850  Deposit Account Name Banner & Witcoff, Ltd.  <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27				<b>3. ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Fee (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive – unavoidable</td><td></td></tr> <tr><td>141</td><td>1,280</td><td>241</td><td>640</td><td>Petition to revive – unintentional</td><td></td></tr> <tr><td>142</td><td>1,280</td><td>242</td><td>640</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>460</td><td>243</td><td>230</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Processing fee under 37 CFR 1.17 (q)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr> <td colspan="4">Other fee (specify) _____</td> <td colspan="4"></td> </tr> <tr> <td colspan="4">*Reduced by Basic Filing Fee Paid</td> <td colspan="4">SUBTOTAL (3) (\$ 0)</td> </tr> </tbody> </table>				Large Entity Fee Code (\$)	Fee (\$)	Small Entity Fee Code (\$)	Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge - 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2. EXTRA CLAIM FEES  Total Claims 16 -20 ** = 0 X 9 = 0 Independent Claims 6 -3 ** = 3 X 42 = 126 Multiple Dependent X = 0																																																																																																																																																																																																					
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\*\*or number previously paid, if greater; For Reissues, see above

SUBMITTED BY						Complete (if applicable)
Name (Print/Type)	Rebecca P. Rokos	Registration No. Attorney/Agent)	42,109	Telephone	312-715-1000	
Signature	<i>Rebecca P. Rokos</i>			Date	December 4, 2001	

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I hereby certify that the attached correspondence, identified below, is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" under 37 CFR § 1.10 on the date indicated above in an envelope addressed to:

U.S. Patent and Trademark Office  
Box Patent Application  
P. O. Box 2327  
Washington, D.C. 22202

By: Rebecca P. Doktor  
(person actually depositing)

Application Number: Not Yet Assigned  
Filing Date: Concurrently Herewith  
First Named Inventor: Anthony C. Mulligan, et al.  
Group Art Unit: Not Yet Assigned  
Examiner Name: Not Yet Assigned  
Attorney Docket No. 03248.00038

1. Utility Patent Application Transmittal;
2. Fee Transmittal for FY 2002;
3. Application Data Sheet;
4. Patent Application (33 sheets including Abstract);
5. Drawings ( 4 sheets with Fibures 1-4, 5a-5c and 6-7);
6. Joint Declaration for Patent Application; and
7. Return Postcard

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

PATENT APPLICATION SERIAL NO. \_\_\_\_\_

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
FEE RECORD SHEET

12/11/2001 RMEBRAHT 00000052 010850 10005084

01 FC:201	370.00 CH
02 FC:203	45.00 CH
03 FC:202	126.00 CH
04 FC:204	140.00 CH

PTO-1556  
(5/87)